



## FUGITIVE DUST MANAGEMENT

### Region 8 Sustainability & Environmental Management System

#### 1.0 Purpose & Scope

Land development activities, including but not limited to excavating or grading, generate fugitive dust. Fugitive dust is a pollutant regulated by the State agencies pursuant to the EPA Clean Air Act. This procedure provides an overview of the air pollution reporting and permitting requirements that may apply to land development activities.

#### 2.0 Activities & Departments Affected

Activities that may churn up dust; Building and Property Managers, and Project Managers:

- Ground maintenance (at the Denver Federal Center (DFC) Team 6)
- Outdoor construction projects (at the DFC, Team 5, Construction Management Group)
- Environmental cleanup (at the DFC, the Environmental Programs Group (EPG))

#### 3.0 Exclusions

Each state in Region 8 recognizes the importance of fugitive dust and that measure need to be taken to minimize its generation. In Colorado, land development activities less than 25 contiguous acres and less than 6 months in duration do not need to report air emissions to the state. In Utah, fugitive emissions from any source shall not exceed 15% opacity, in South Dakota the opacity is 30%.

#### 4.0 Forms Used & Permits Required: (include reporting requirements)

☐ Federal and State Forms and Permits:

PERMIT / FORM / REPORT <sup>(1)</sup>	SUBMITTED TO: FEDERAL OR STATE AGENCY	SUBMITTAL FREQUENCY
Colorado Air Pollution Emissions Notice (APEN)	Colorado Dept. of Public Health and Environment, Air Pollution Control Division	30 days prior to commencing
[Colorado] Application for Construction Permit		prior to commencing
Montana Air Quality Permit Application for Portable Sources	Montana Department of Environmental Quality, Air Resources Management Bureau	prior to commencing
[North Dakota] Air Pollution Control Permit To Construct	North Dakota Department of Health	prior to commencing
[South Dakota] Air Quality Permit Application Form Minor Operating Permit	South Dakota Department of Environment and Natural Resources, Air Quality Program	prior to commencing
[South Dakota] Air Quality Permit Application Form Construction Activities in the Rapid City Area - Notice of	South Dakota Department of Environment and Natural Resources, Air Quality Program	prior to commencing



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PERMIT / FORM / REPORT <sup>(1)</sup>	SUBMITTED TO: FEDERAL OR STATE AGENCY	SUBMITTAL FREQUENCY
Intent and Certification of <a href="#">Applicant Form</a>		
[Wyoming] Air Quality Chapter 6, Section 3, <a href="#">Operating Permit Application Form</a> <sup>(2)</sup>	Wyoming Department of Environmental Quality, Air Quality Division	prior to commencing
[Wyoming] Construction Permit, Chapter 6, Section 2 <a href="#">Application Form</a>		prior to commencing

(1) Maintain records in the office.

(2) Wyoming: The criteria particulate pollutants include matter equal to or less than 10 microns in diameter (PM10), total suspended particulates (TSP), and matter equal to or less than 2.5 microns in diameter (PM2.5). <http://deq.state.wy.us/aqd/operating.asp>

☐ In-house GSA Region 8 and Contractor Forms: None

## 5.0 Acronyms, Abbreviations, and Definitions

Acronyms	Meaning
APCD	Air Pollution Control Division [CDPHE]
APEN	Air Pollutant Emission Notice [CDPHE]
CDPHE	Colorado Department of Public Health and Environment
DFC	Denver Federal Center
FDCP	Fugitive Dust Control Plan
PM	Particulate matter
TSP	total suspended particulates

### Definitions:

Fugitive dust: particles lifted into the air caused by man-made and natural activities such as the movement of soil, vehicles, equipment, blasting, and wind.

## 6.0 Procedure

**State Specific Procedures & Requirements** [refer to individual State Legal Reviews for details on Statutes, Laws, and Rules]:

STATE	REQUIREMENTS / PROCEDURES
Colorado	Reporting and Permitting Requirements for land development activities greater or equal to 25 continuous acres and/or 6 months in duration typically require the submission of an Air Pollutant Emission Notice (APEN) to the Colorado Department of Public Health and Environment (CDPHE), Air Pollution Control Division (APCD).
Montana	Take reasonable precautions. In a district where environmental concerns exist, a control plan may be required. Where construction equipment (i.e., crusher,



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STATE	REQUIREMENTS / PROCEDURES
	screen, wash plant, asphalt plant, concrete batch plant, generator/engine) exists, then a Montana Air Quality Permit Application for Portable Sources may be required.
North Dakota	No person shall cause or permit fugitive emissions from any source whatsoever, including a building, its appurtenances, or a road, to be used, constructed, altered, repaired, or demolished.
South Dakota	Particulates are considered an air pollutant and monitored in South Dakota; however, permits are generally only required for where emissions can be measured in tons/yr, Asphalt Plants, Rock Crushers, Concrete Plants and Grain Elevators. The chief engineer may issue temporary permits for the use of public water for construction (e.g. highway construction/maintenance), testing, or drilling purposes. A permit for Construction and Demolition work is required to prevent impact to stormwater.
Utah	Air Quality rules specify that dust created by construction or demolition activities, land clearing and exposed surfaces, and roadways be minimized and not leave the site. If the operation is along the Wasatch Front, owner/operators are also required to develop and submit a <a href="#">dust control plan</a> . Fugitive emissions from any source shall not exceed 15% opacity. Opacity observations of emissions from stationary sources shall be conducted in accordance with EPA Method 9 (R307-309-4. Fugitive Emissions).
Wyoming	Sources operating within the State of Wyoming are required to control fugitive dust emissions. Construction permits to address fugitive dust are considered a serious matter.

#### Standardized Procedure:

- 6.1 When working on a construction or demolition project, or any project that may disturb surface soils and may generate large amounts of dust, contact the Environmental Programs Group at the GSA Denver Federal Center (DFC) or your State agency that regulates Air Quality for advice as how best to mitigate fugitive dust generation. Each state has its own regulator requirement.

Comply with all federal regulations, and where applicable state regulations and local ordinances. Where required obtain permits and comply with reporting requirements.

- 6.2 Determine if a permit is required and the type and number of permits needed; see State Specific Procedures & Requirements above. In Region 8, Colorado and Utah require Air Quality Permits; most states require a construction permit.

- 6.2.1 If a permit is required, a filing fee may be required. These fees are due prior to commencing work, check with the state air quality agency as to whether a fee is required, the amount of the fee (in Colorado the fee is based upon an hourly rate), and as to when the application and fee are due. An Annual Fee only applies to operations where the generation of fugitive dust is a continual process such as at a mine or aggregate facility. The party that



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submits the permit will be responsible for paying the permitting fees.

In Colorado:

The Air Quality Division has up to 90 days to issue a permit once a complete APEN is received. If an incomplete APEN is received, the Division may request additional information and the permit-processing clock will start over. If a permit is required for your land development project, site operations cannot commence until the air permit has been issued. You must plan ahead!

The Start Up Notice for a permitted land development project must be submitted to the Division at least 30 days prior to commencing operation of the source. As with the APEN, you must plan ahead. The Start Up Notice is available through the Division.

- 6.2.2 Determine if a Fugitive Dust Control Plan (FDCP) is required with the application; this is probable in Colorado and Utah. In Utah, the Wasatch Front may include additional requirements.
- 6.3 If a FDCP is required, the Contractor prepares the Plan. The FDCP addresses how dust will be monitored, kept to a minimum at the project site, and controlled. Control measures listed in the plan should be specific to the land development site.
  - 6.3.1 If a FDCP is not required for a permit. Some form of plan is required by the GSA to specify dust control measures. Though a permit may not be required in most state; if people do complain to the State Air Quality Division, the Division is required to investigate. Therefore, some form of plan is recommended.
- 6.4 All developers are required to use reasonable controls such as watering to prevent fugitive emissions.
- 6.5 In general no monitoring requirements are necessary other than visual inspection of wind blown particulates; fugitive dust. Depending upon State requirements, Opacity measurements may be accomplished with a trained eye or a meter device.

In Colorado and in Utah, Opacity limits are contained in the source's air quality permit. Enforcement actions can be taken against those with excessive opacity. A state compliance auditor/inspector may inspect areas during daylight hours; the Air Quality Division also responds to complaints. In Utah, when a notice of violation is issued for excessive fugitive dust, the source is required to submit a plan detailing additional control measures to reduce the dust problem.

- 6.5.1 In the unlikely case where known contamination exists, a State Air Quality



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Division may require either weather monitoring or a weather station installed.

- 6.6 If complaints are received about dust coming from smaller parcels, a fugitive dust control plan may be required by this Department. Fugitive dust created by high wind events is exempt from these regulations.
- 6.7 Land development activities may be considered complete when all disturbed areas are stabilized from dust emissions. If an extension or modification to the air permit is required, contact the Division to discuss the change and determine whether a new permit is required. If a project is cancelled, notify the Air Quality Division in writing immediately.

## **7.0 Records Management**

Permits: (i.e., Air Pollutant Emission Notice (APEN) - and - Application for Construction Permit, from CDPHE)  
Fugitive Dust Control Plans  
Monitoring data

## **8.0 References**

Colorado:

Sept. 2004, Air Pollution Control Division, Colorado Department of Public Health and Environment, Air Pollutant Emission Notice - and - Application for Construction Permit

Montana:

May 5, 2008, Montana Department of Environmental Quality, Air Resources Management Bureau, Montana Air Quality Permit Application for Portable Sources

North Dakota:

February 24, 2010, North Dakota Department of Health, North Dakota State Implementation Plan for Regional Haze, A Plan for Implementing the Regional Haze Program Requirements of Section 308 of 40 CFR Part 51, Subpart P - Protection of Visibility

South Dakota:

South Dakota Department of Environment and Natural Resources, Air Quality Program, Air Quality Permit Application Form Minor Operating Permit

Utah:

August 2004, Utah Division of Air Quality, Fugitive Dust Control Plans  
The Fugitive Emissions and Fugitive Dust Rule (R307 -309)



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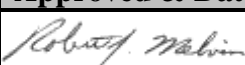
Wyoming:

Wyoming Air Quality Standards and Regulations, Chapter 2 - Ambient Standards, Section 2, particulate matter; Chapter 3 - General Emission Standards, Section 2(f), fugitive dust; Chapter 6, Permitting Requirements, Section Operating Permits

## 9.0 Appendices

**Attachment A:** Fugitive Dust Management Flowchart

**Attachment B:** Air Pollutant Emission Notice (APEN) – and – Application for Construction Permit

Document Control Information:	Approved & Dated:
Fugitive Dust Management "Month-Date-Year".doc	 March 30, 2010

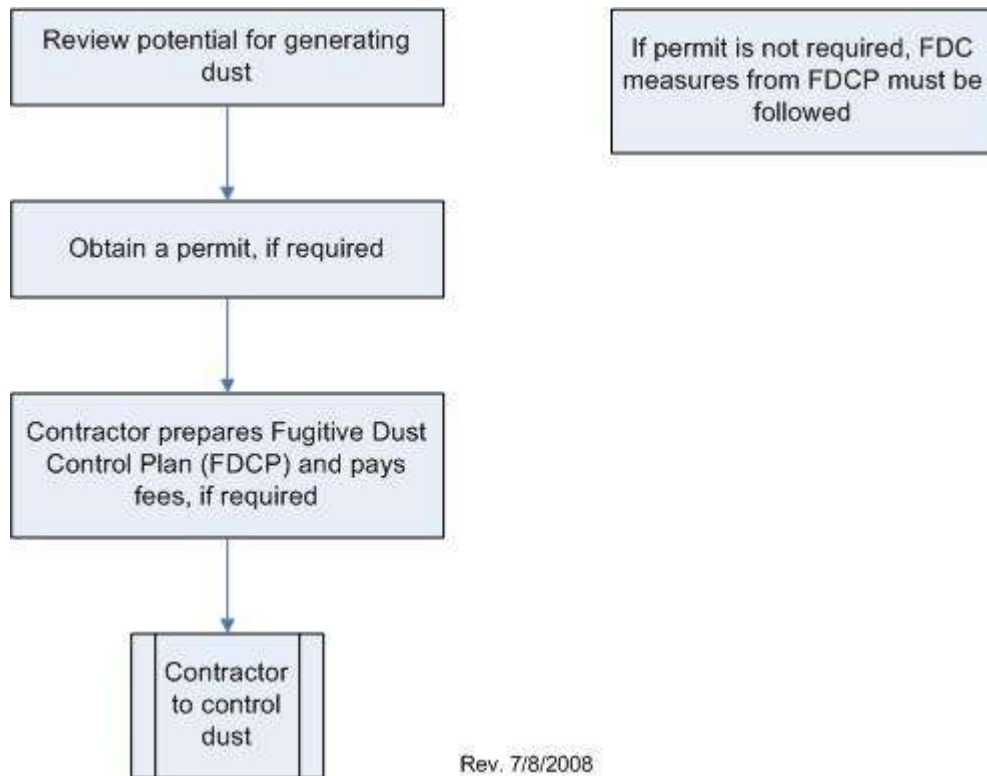
Document Revision and Update:		
Revision Date	Nature of Revision	Revision made by:
12/15/2005	Working Draft	Robert Melvin, John Kleinschmidt
03/16/2006	Original Release	Robert Melvin
01/29/2010	Add ISO 14001 Document Controls,	Robert Melvin
03/30/2010	Revise to include state regulations, add Flowchart (by Erik Petrovskis)	Robert Melvin



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#### ATTACHMENT A: Fugitive Dust Management Flowchart





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#### ATTACHMENT B: Colorado Air Pollutant Emission Notice (APEN) – and – Application for Construction Permit

##### - LAND DEVELOPMENT -

#### Air Pollutant Emission Notice (APEN) – and – Application for Construction Permit

☐ New Facility   ☐ Transfer of Ownership \*   ☐ Change in Production   ☐ No Change (APEN Update Only)

All sections of this APEN and application must be completed prior to submittal to the Division for both new and existing facilities. An application with missing information may be determined incomplete and may result in longer engineer processing times.

\* Note: For transfer of ownership or company name change of a permit, you must also submit a Construction Permit Application form.

Permit Number \_\_\_\_\_

AIRS Number \_\_\_\_\_

Company Name: \_\_\_\_\_

Billing Address: \_\_\_\_\_

Zip Code: \_\_\_\_\_

Person to Contact: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

Fax Number: \_\_\_\_\_

**Please provide description of the activity: (Also, please provide a site map)**

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Project Name & Location:

County: \_\_\_\_\_ Section: \_\_\_\_\_ Township: \_\_\_\_\_ Range: \_\_\_\_\_

Total area of land in project: \_\_\_\_\_ Acres

Date earthmoving will – Commence: \_\_\_\_\_ Stop: \_\_\_\_\_

Total area subject to earthmoving: \_\_\_\_\_ Acres

Total disturbed area at any one time: \_\_\_\_\_ Acres

Area to be paved (roads, parking lots): \_\_\_\_\_ Acres

Date paving will be completed: \_\_\_\_\_

Estimated time to complete entire project (includes buildings) \_\_\_\_\_

List any known or suspected contaminants in the soil: \_\_\_\_\_

Brief description of how the project development will occur (attach an additional page if necessary):

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## FUGITIVE DUST CONTROL PLAN FOR LAND DEVELOPMENT

(This must be submitted with the Air Pollutant Emission Notice-and-Application for Emission Permit)

Regulation No. 1 requires that a fugitive dust control plan be submitted by applicants whose source / activity results in fugitive dust emissions. The control plan must enable the source to minimize emissions of fugitive dust to a level that is technologically feasible and economically reasonable. If the control plan is not adequate in minimizing emissions a revised control plan may be required. The control plan (if acceptable to the Division) will be used for enforcement purposes on the sources.

Please check the dust control measures which you propose for your activity. The Division will enforce the control measures checked. Use separate sheets if more space is needed. Also note items with an asterisk (\*). This indicates those measures which will probably be required. *Form has been expanded from original CDPHE form.*

Name of Owner of Property: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Project Location: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Office Phone: \_\_\_\_\_ Cell Phone: \_\_\_\_\_

Describe type of activity: \_\_\_\_\_

Estimated Starting Date: \_\_\_\_\_ Completion Date: \_\_\_\_\_

Work Schedule: \_\_\_\_\_ Hrs/day \_\_\_\_\_ days/week \_\_\_\_\_ weeks/year

### I. Control of Unpaved Roads on Site

- ☐ Watering
  - ☐ Frequent (Watering Frequency of 2 or More Times Per Day): \_\_\_\_\_ times/day
  - ☐ As Needed
  - ☐ Method \_\_\_\_\_ (i.e.: flusher truck)
- ☐ Application of Chemical Stabilizer; identify chemical \_\_\_\_\_
- ☐ Vehicle Speed Control
  - Speeds limited to \_\_\_\_\_ mph maximum. Speed limit signs must be posted.
  - (Generally 30 mph is maximum approvable speed on site.)
- ☐ Graveling

### II. Control of Disturbed Surface Areas on Site

- ☐ Watering
  - ☐ Frequent (Watering Frequency of 2 or More Times Per Day) : \_\_\_\_\_ times/day
  - ☐ As Needed
  - ☐ Method \_\_\_\_\_ (i.e.: flusher truck)
- ☐ Application of Chemical Stabilizer; identify chemical \_\_\_\_\_
- ☐ Vehicle Speed Control
  - Speeds Limited To \_\_\_\_\_ MPH Maximum. Speed Limit Signs Must Be Posted.
- ☐ Revegetation (Revegetation Must Occur Within One Year of Soil Disturbance)
  - ☐ Scheduled revegetation \_\_\_\_\_
  - ☐ Seeding with mulch
  - ☐ Seeding without mulch
- ☐ Furrows at right angle to prevailing wind
  - Depth of furrows \_\_\_\_\_ Inches (must be greater than 6")



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- ☐ Compaction Of Disturbed Soil On A Daily Basis To Within 90 % Of Maximum Compaction (As determined by a Proctor Test).
  - ☐ Foundation areas only; or
  - ☐ All disturbed soil.
- ☐ Wind Breaks (must be in place before work begins)
  - Type: \_\_\_\_\_ (Example: Snow Fence, Silt Fence, etc.)
  - Location: \_\_\_\_\_
- ☐ Synthetic Or Natural Cover For Steep Slopes.
  - Type: \_\_\_\_\_ (Netting, Mulching, etc.)

### III. Prevention of Mud and Dirt Carried Out Onto Paved Surfaces.

- ☐ Prevention:
  - ☐ Gravel Entry Ways
  - ☐ Washing Vehicle Wheels
  - ☐ Other: \_\_\_\_\_
- ☐ Cleanup of Paved Areas Frequency: \_\_\_\_\_ Times Per Day
- ☐ Method:
  - ☐ Street Sweeper
  - ☐ Hose With Water
  - ☐ Other: \_\_\_\_\_

### Additional Sources of Emissions

List any other sources of emissions or control methods

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Signature of Legally Authorized Person (not a vendor or consultant)

Date

Name (please print)

Title

### Check the appropriate box if you want:

- ☐ Copy of the Preliminary Analysis conducted by the Division
- ☐ To review a draft of the permit prior to issuance



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(Checking any of these boxes may result in an increased fee and/or processing time)

Send this form along with appropriate  
payment to:  
Telephone: (303) 692-3150

**Colorado Department of Public Health and Environment  
Air Pollution Control Division  
APCD-SS-B1  
4300 Cherry Creek Drive South  
Denver, CO 80246-1530**

**Small Business Assistance Program**

(303) 692-3148

**Small Business Ombudsman**

(303) 692-2135